

WHAT IS CLAIMED IS:

1. A composition comprising:
 - a) a biocompatible polymer;
 - b) a biocompatible solvent; and
 - c) from greater than about 40 to about 60 weight percent of a water-insoluble, biocompatible contrast agent;wherein the ratio of biocompatible polymer to the water-insoluble biocompatible contrast agent is about 0.055 or greater; and further wherein the weight percent of each component is based on the total weight of the composition.
2. The composition according to Claim 1, wherein the said ratio of biocompatible polymer to the water-insoluble biocompatible contrast agent is about 0.058 or greater.
3. The composition according to Claim 1, wherein the said ratio of biocompatible polymer to the water-insoluble biocompatible contrast agent is about 0.070 or greater.
4. The composition according to Claim 1, wherein the water-insoluble biocompatible contrast agent is employed at a concentration of from greater than about 40 to about 55 weight percent, based on the total weight of the composition.
5. The composition according to Claim 1, wherein the water-insoluble biocompatible contrast agent is employed at a concentration of from about 45 to about 50 weight percent, based on the total weight of the composition.
6. The composition according to Claim 1, wherein the average particle size of the water-insoluble biocompatible contrast agent is less than about 5 microns.

7. The composition according to Claim 6, wherein the average particle size of the water-insoluble biocompatible contrast agent is from about 2 microns to about 3 microns.
8. The composition according to Claim 1, wherein the water-insoluble, biocompatible contrast agent is selected from the group consisting of barium sulfate, tantalum, tantalum oxide, gold, platinum and tungsten.
9. The composition according to Claim 1, wherein the biocompatible polymer is employed at a concentration of from about 2 to about 40 weight percent, based on the total weight of the composition.
10. The composition according to Claim 9, wherein the biocompatible polymer is employed at a concentration of from about 2 to about 30 weight percent, based on the total weight of the composition.
11. The composition according to Claim 10, wherein the biocompatible polymer is employed at a concentration of from about 2 to about 20 weight percent, based on the total weight of the composition.
12. The composition according to Claim 1, wherein the biocompatible polymer is selected from the group consisting of cellulose acetates, ethylene vinyl alcohol copolymers, hydrogels, polyacrylonitrile, polyvinylacetate, cellulose acetate butyrate, nitrocellulose, copolymers of urethane/carbonate, copolymers of styrene/maleic acid, and mixtures thereof.
13. The composition according to Claim 1, wherein the concentration of biocompatible solvent is from about 20 weight percent to less than about 58 weight percent, based on the total weight of the composition.
14. The composition according to Claim 13, wherein the concentration of biocompatible solvent is from about 20 to about 57 weight percent, based on the total weight of the composition.

15. The composition according to Claim 14, wherein the concentration of biocompatible solvent is from about 40 to about 55 weight percent, based on the total weight of the composition.
16. The composition according to Claim 1, wherein the biocompatible solvent is selected from the group consisting of dimethylsulfoxide ("DMSO"), ethanol, ethyl lactate, and acetone.
17. A method for embolizing a blood vessel by delivering, via a catheter, into said blood vessel a composition comprising:
 - a) a biocompatible polymer;
 - b) a biocompatible solvent; and
 - c) from greater than about 40 to about 60 weight percent of a water-insoluble, biocompatible contrast agent;wherein the ratio of biocompatible polymer to the water-insoluble biocompatible contrast agent is about 0.055 or greater; and further wherein the weight percent of each component is based on the total weight of the composition; under conditions wherein a precipitate is formed which embolizes said blood vessel.
18. The method according to Claim 17, wherein the said ratio of biocompatible polymer to the water-insoluble biocompatible contrast agent is about 0.058 or greater.
19. The method according to Claim 17, wherein the said ratio of biocompatible polymer to the water-insoluble biocompatible contrast agent is about 0.070 or greater.
20. The method according to Claim 17, wherein the precipitate formed from the composition has a releasable number of particles of water-insoluble biocompatible

contrast agent equal to or greater than 10 microns of about 25 particles or less per milliliter of solution.

21. The method according to Claim 20, wherein the precipitate formed from the composition has a releasable number of particles of water-insoluble biocompatible contrast agent equal to or greater than 25 microns of about 3 particles or less per milliliter of solution.

22. A kit of parts comprising:

a) an embolic composition which comprises

i) a biocompatible polymer;

ii) a biocompatible solvent; and

iii) from greater than about 40 to about 60 weight percent of a water-insoluble, biocompatible contrast agent;

wherein the ratio of biocompatible polymer to the water-insoluble

biocompatible contrast agent is about 0.055 or greater; and

further wherein the weight percent of each component is based on the total weight of the composition; and

b) a catheter.

23. The kit of parts according to Claim 22, which further comprises a microballoon catheter to attenuate or arrest blood flow.